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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,085	02/06/2004	James F. Macier	1058742	2084

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EXAMINER

VASUDEVA, AJAY

ART UNIT	PAPER NUMBER
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3617

NOTIFICATION DATE	DELIVERY MODE
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01/14/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipmtl@OSLER.COM

Office Action Summary

Application No.

10/708,085

Applicant(s)

MACIER ET AL.

Examiner

Ajay Vasudeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/17/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-33 and 41-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-33 and 41-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 18, 19 and 22-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Herrera (US 6,358,106 B1).

Herrera shows an outboard motor (fig. 5) having an engine [8], an engine cover [14], and first and second lower/midsection covers [22, 24]. The lower motor cover has a portion that confronts a portion of the exhaust housing assembly 26 (see fig. 4; and col. 4, lines 7-11). Because the exhaust housing assembly of Herrera supports the powerhead, and a portion of the lower motor cover confronts a portion of the exhaust housing assembly, such space is considered as a midsection that supports the engine. At least three silencers [44] are disposed in the volume defined between the engine and the covers so as to substantially match the contour of the respective cover (fig. 5 and fig. 6; col. 3-4).

The first and third silencers attached to the lower covers have a density that is greater than the density of the second silencer attached to the upper cover. As such, the first and third silencers are considered to be more waterproof than the second silencer.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art

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are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20, 21, 30-33 and 41-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrera (US 6,358,106 B1).

Re claims 41-47, 49-51 and 53: Herrera provides an engine cover and midsection covers to respectively cover the engine and the midsection of the outboard motor, as above. The vibro-acoustic silencers are adhered to the inner surfaces of the respective covers, and therefore, the outer contours of the vibro-acoustic silencers are shaped to substantially match the outer contours of the first and second volumes, respectively.

Applicant may note that Herrera merely shows a block outline (phantom outline) of the exposed powerhead (figure 2), and additionally, fails to show any outline of the midsection. However, Herrera does not expressly disclose or show the positioning of the silencers relative to the respective outlines of the engine or the midsection. Therefore, it is not clear if the inner contours of the vibro-acoustic silencers are shaped to substantially match the inner contours of the first and second volumes, respectively.

It is noted that the primary purpose of the silencers is to maximize the reduction of noise that emanates from the outboard motor. It is also noted that the degree of noise attenuation is directly proportional to the volume of the vibro-acoustic treatment provided. Therefore, it would have been obvious for one skilled in the art at the time of the invention to substantially fill the available volume with a vibro-acoustic treatment so as to maximize the noise attenuation. Providing such a vibro-acoustic treatment to fill the available volume would have made the treatment match the shape of the respective volumes.

Further, it would also have been obvious for one to provide a small but equal clearance between the vibro-acoustic treatment and the respective engine and midsection surfaces so as

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to avoid localized hot spots, and to allow quick and equalized dissipation of localized heat from such surfaces. Therefore, providing a small but equal clearance between the vibro-acoustic treatment and the respective engine and midsection surfaces would have made the treatment significantly match the shape of the respective volumes.

As explained above, because the first and third silencers attached to the lower covers have a density that is greater than the density of the second silencer attached to the upper cover, they are considered to be more waterproof than the second silencer.

Re claims 20, 21, 30-33, 48, 52, 54: Herrera shows an outboard motor with a 250 hp engine, as above, with the lower silencers having a density of two pounds per cubic foot, and the upper silencer having a density of one pound per cubic foot (col. 4, lines 41-53). However, Herrera does not specifically disclose the lower silencers having a density of approximately twenty-two pounds per cubic foot, and the upper silencer having a density of at least four pound per cubic foot (claims 20, 21, 30-33, 48, 52, 54). Further, Herrera does not show the motor emitting a certain decibel at a specific rpm (claims 30-33).

The Examiner notes that for higher capacity engines emitting louder noise, the claimed density selection for the respective silencers is considered to be an obvious design choice. It would have been obvious for an artisan to make the silencers with substantially higher density, such as with a density in the range of approximately twenty-two pounds per cubic foot. Choosing such density would have been desirable because it would have provided maximum noise reduction without adding too much weight to the outboard motor or without adversely affecting the engine performance.

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Regarding the level of noise produced by the motor at a specific rpm, it is noted that such is a function of diverse factors – such as the age and maintenance condition of the engine, the gear/transmission ratio, the load on the engine, the fuel and lubricant used, the condition of the air intake and exhaust systems, the atmospheric temperature condition at the time of engine startup or running etc. Therefore, it would have been inherent for the engine to emit a noise corresponding to the specific rpm, as being claimed, for a certain combination of such diverse factors.

Response to Arguments

5. Applicant's arguments filed 09/17/2007 with respect to the rejections based on Herrera ('106) have been fully considered but they are not persuasive.

Applicant's argument: Applicant has pointed out that the claims require the engine to be supported on the midsection, while the Herrera reference discloses the weight of the powerhead 8 as being supported by an exhaust housing assembly 26. Because the powerhead 8 of Herrera is supported by the exhaust housing assembly and not on the space enclosed by the lower motor cover, such space cannot be considered a midsection.

Response: Herrera discloses the lower motor cover having a portion that confronts a portion of the exhaust housing assembly 26 (see fig. 4; and col. 4, lines 7-11). Because the exhaust housing assembly of Herrera supports the powerhead, and a portion of the lower motor cover confronts a portion of the exhaust housing assembly, such space can be considered as a midsection that supports the engine.

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Applicant's argument: Applicant has pointed out that the vibro-acoustic treatment 38 in the Herrera reference forms a layer that adheres to the inner surface of the respective motor cover, and as such follows the shape of the port and starboard motor covers.

Re claim 18, because the port and starboard lower motor covers 22, 24 of Herrera curve away from the exhaust housing assembly 26, the vibro-acoustic treatment 38 of Herrera cannot be considered as filling a majority of the first volume, i.e., a majority of the volume between the midsection and the midsection cover.

Re claims 41 and 49, the vibro-acoustic treatment 38 of Herrera does not have a shape that substantially matches the shape of the volume defined by the upper or lower motor covers of Herrera and the powerhead of Herrera. Therefore, the vibro-acoustic treatment 38 applied to the inner surface of the upper motor cover 14 of Herrera is not "shaped to substantially match the shape of the volume" as claimed, i.e. the shape of the volume defined by the respective cover and the engine.

Response: Claim 18 recites a first volume between a midsection and a midsection cover, wherein the first volume is defined by the contour of the midsection cover alone, but not necessarily by the contour of the midsection of the motor. Similarly, the claim also recites a second volume between an engine and an engine cover, wherein the second volume is defined only by the contour of the engine cover, but not necessarily by the contour of the engine.

In the present case, the entire space between the inner surface of the midsection cover 46 and the exposed surface of film 52 is considered to be the "first volume" (see fig. 6). Similarly, the entire space between the inner surface of the engine cover and the exposed surface of film is considered to be the "second volume".

With such a broad interpretation, Applicant may note that the silencer is considered as filling the entire volume – not just a majority volume – between the midsection and the

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midsection cover, as well as between the engine and the engine cover. Additionally, the silencer has a shape that is considered to be the exact match – and not just a substantial match – of the shape of the volume.

Re claims 41 and 49, Applicant may further note that the curving away of the covers of Herrera from the exhaust housing assembly does not necessarily mean that the vibro-acoustic treatment does not fill a majority of the first and second volumes.

As noted in the rejection of claims 41-47, 49-51 and 53 based on new grounds, Herrera merely shows a block outline of the exposed powerhead (figure 2), and fails to show any outline of the midsection. Because Herrera does not expressly disclose or show the positioning of the silencers relative to the respective outlines of the engine or the midsection, it cannot be definitely concluded that the vibro-acoustic silencers are not shaped to substantially match the shape of the first and second volumes, respectively. Please refer to ¶4 of this Office action for details of the new rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- JP 05-246390 A shows an outboard motor having a vibro-acoustic treatment for the engine cover.

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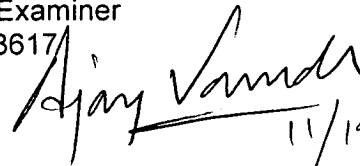
- JP 05-270489 A shows an outboard motor having a buoyant matter disposed under the engine cover that substantially matches the shape of the void under the cover (see figure 13). In this case, commonly known buoyant matter, such as any closed cell foam, can be considered to be a vibro-acoustic material.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajay Vasudeva
Primary Examiner
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11/19/07